AMENDMENTS TO THE CLAIMS

(IN FORMAT COMPLIANT WITH THE REVISED 37 CFR 1.121)

1.   (CURRENTLY AMENDED) A system comprising:

a formatter configured to format a plurality of data frames ~~of~~ <u>received in</u> a transport stream by inserting a plurality of synchronization data to produce a block stream;

5   an error correction encoder configured to encode said block stream to produce an error protected block stream;

an interleave module configured to interleave said error protected block stream to produce a data stream;

an inserter configured to insert a synchronization signal

10   into said data stream; and

a turbo encoder configured to encode said data stream to produce an encoded stream.

2.   (ORIGINAL) The system according to claim 1, wherein said transport stream defines two high definition television programs substantially simultaneously.

3.   (ORIGINAL) The system according to claim 1, wherein said turbo encoder comprises:

a first systematic encoder configured to encode said data stream to produce a first redundant stream;

2

5   a bit interleave module configured to interleave said

data stream to produce a second data stream; and

          a second systematic encoder configured to encode said

second data stream to produce a second redundant stream.

          4.   (ORIGINAL) The system according to claim 3, wherein

said turbo encoder further comprises:

          a puncture module configured to puncture bits from said

first redundant stream and said second redundant stream to produce

5   a redundant portion of said encoded stream.

          5.   (PREVIOUSLY CANCELED)

          6.   (CURRENTLY AMENDED) A method for transmitting

comprising the steps of:

          (A)   formatting a plurality of data frames ~~of~~ <u>received in</u>

a transport stream by inserting a plurality of synchronization data

5   to produce a block stream;

          (B)   error correction encoding said block stream to

produce an error protected block stream;

          (C)   interleaving said error protected block stream to

produce a data stream;

10   (D)   inserting a synchronization signal into said data

stream; and

3

(E) turbo encoding said data stream to produce an encoded stream.

7.   (ORIGINAL) The method according to claim 6, wherein said transport stream defines two high definition television programs substantially simultaneously.

8.   (ORIGINAL) The method according to claim 6, further comprising the steps of:

encoding said data stream to produce a first redundant stream;

interleaving said data stream to produce a second data stream; and

encoding said second data stream to produce a second redundant stream.

9.   (ORIGINAL) The method according to claim 8, further comprising the step of:

puncturing bits from said first redundant stream and said second redundant stream to produce a redundant portion of said encoded stream.

10.   (PREVIOUSLY CANCELED)

4

11.   (CURRENTLY AMENDED) A system comprising:

a converter configured to convert a symbol stream comprising a plurality of symbols into ~~an encoded~~ a stream having an encoding;

a turbo decoder configured to decode said ~~encoded~~ stream to produce a data stream without said encoding; and

a synchronization remover configured to remove a synchronization signal from said data stream.

12.   (PREVIOUSLY AMENDED) The system according to claim 11, wherein said symbol stream defines two high definition television programs substantially simultaneously.

13.   (CURRENTLY AMENDED) The system of claim 11, wherein said turbo decoder comprises:

a plurality of decode modules configured to decode said ~~encoded~~ stream to produce said data stream.

14.   (CURRENTLY AMENDED) The system according to claim 13, wherein said turbo decoder further comprises:

a de-puncture module configured to de-puncture a redundant portion of said ~~encoded~~ stream.

15.   (PREVIOUSLY CANCELED)

5

16. (CURRENTLY AMENDED) A method for receiving comprising the steps of:

(A) converting a symbol stream comprising a plurality of symbols into ~~an encoded~~ a stream having an encoding;

5   (B) turbo decoding said encoded stream to produce a data stream without said encoding; and

(C) removing a synchronization signal from said data stream.

17. (PREVIOUSLY AMENDED) The method according to claim 16, wherein said symbol stream defines two high definition television programs substantially simultaneously.

18. (CURRENTLY AMENDED) The method according to claim 16, wherein step (B) further comprises the sub-step of:

decoding said ~~encoded~~ stream in a plurality of modules to produce said data stream.

19. (CURRENTLY AMENDED) The method according to claim 18, further comprising the step of;

de-puncturing a redundant portion of said ~~encoded~~ stream.

20. (PREVIOUSLY CANCELED)

6

21. (PREVIOUSLY NEW) The system according to claim 1, further comprising:

a bit-to-symbol mapper configured to map said encoded stream to produce a symbol stream carrying a plurality of symbols

5   each consisting of two error protected bits and one redundant bit.

22. (PREVIOUSLY NEW) The method according to claim 6, wherein said turbo encoding has a bit error rate not greater than 2 errors per 10,000 bits.

23. (PREVIOUSLY NEW) The system according to claim 11, further comprising:

a demodulator configured to demodulate a signal to produce said symbol stream wherein each of said symbols consists of

5   two error protected bits and one redundant bit.

24. (PREVIOUSLY NEW) The method according to claim 16, wherein said turbo decoding has a bit error rate not greater than 3 errors per 100,000 bits.